

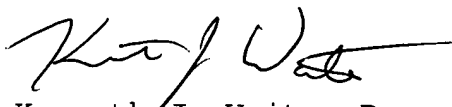
which protrude from the supply liquid contained in the supply chamber, connected to means for moving and incubating the producing systems and the supply liquid.

17. (new) The device of claim 16, wherein the inner housing has between 2 and about 1000 wells.
18. (new) The device of claim 16, wherein the wells have side walls that are coated with a component which specifically binds the in vitro synthesized proteins.
19. (new) The device of claim 18, wherein the wells are coated with components that are suitable for purifying polypeptides that bind to the components.
20. (new) The device of claim 18, wherein the wells are coated with streptactin, avidin or streptavidin.
21. (new) The device of claim 16, wherein the wells of the inner housing each have a volume between 50 μ l and 10 ml.
22. (new) The device of claim 16, wherein the volume of the supply solution is five to twenty-times the sum of the volumes of the wells.
23. (new) The device of claim 16, wherein the semipermeable membrane is a dialysis membrane or an ultrafiltration membrane with a pore size of 3 to 100 kDa.
24. (new) The device of claim 16 wherein the upper ends of the wells are sealed individually.
25. (new) The device of claim 16 wherein the outer housing is sealed with a closing cover.

26. (new) The device of claim 16, wherein the wells of the inner housing are composed of blocks having the same bore geometry and having a membrane fixed between the blocks.
27. (new) The device of claim 16, wherein the means for moving is configured such that the producing system and supply solution are mixed simultaneously.
28. (new) The device of claim 27, wherein the mixing is achieved by a shaking or stirring element.
29. (new) A method for carrying out one or several biochemical reactions concurrently, said method comprising utilizing a device as claimed in claim 16, wherein the supply liquid in the supply chamber is not subjected to an external applied pressure during the biochemical reaction and thus the molecular exchange between the supply chamber and the individual wells of the inner housing is essentially based on diffusion.
30. (new) A method for carrying out one or several biochemical reactions concurrently, said method comprising utilizing a device as claimed in as claimed in 26 or 27, wherein the supply liquid and optionally the producing system in each of the wells of the inner housing are moved during the biochemical reaction by means of a magnetic stirring element.

31. (new) A kit comprising the following components: a solution comprising a substance buffering between pH 7 and 8, 150 to 400 mM potassium ions, 10 to 50 mM magnesium ions, nucleotide triphosphates, amino acids and a substance reducing sulfide groups; an energy-rich compound; a tRNA fraction; and optionally a RNA polymerase and/or a cell-free lysate.

Respectfully submitted,



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16. A device for carrying out biochemical reactions for cell-free polypeptide biosynthesis and/or for the production of biologically active proteins, said device comprising an external housing that encloses an inner housing, said inner housing having incorporated wells and a supply chamber, wherein the wells of the inner housing each contain a producing system during the biochemical reaction, the supply chamber contains a supply liquid during the biochemical reaction and the wells of the inner housing and the supply chamber are separated by a semipermeable membrane, the inner housing having at least two wells, the lower ends of which are closed by a semipermeable membrane and the upper ends of which protrude from the supply liquid contained in the supply chamber, connected to means for moving and incubating the producing systems and the supply liquid.
17. The device of claim 16, wherein the inner housing has between 2 and about 1000 wells.
18. The device of claim 16, wherein the wells have side walls that are coated with a component which specifically binds the in vitro synthesized proteins.
19. The device of claim 18, wherein the wells are coated with components that are suitable for purifying polypeptides that bind to the components.
20. The device of claim 18, wherein the wells are coated with streptactin, avidin or streptavidin.
21. The device of claim 16, wherein the wells of the inner housing each have a volume between 50 μ l and 10 ml.
22. The device of claim 16, wherein the volume of the supply solution is five to twenty-times the sum of the volumes of the wells.

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23. The device of claim 16, wherein the semipermeable membrane is a dialysis membrane or an ultrafiltration membrane with a pore size of 3 to 100 kDa.
24. The device of claim 16 wherein the upper ends of the wells are sealed individually.
25. The device of claim 16 wherein the outer housing is sealed with a closing cover.
26. The device of claim 16, wherein the wells of the inner housing are composed of blocks having the same bore geometry and having a membrane fixed between the blocks.
27. The device of claim 16, wherein the means for moving is configured such that the producing system and supply solution are mixed simultaneously.
28. The device of claim 27, wherein the mixing is achieved by a shaking or stirring element.
29. A method for carrying out one or several biochemical reactions concurrently, said method comprising utilizing a device as claimed in claim 16, wherein the supply liquid in the supply chamber is not subjected to an external applied pressure during the biochemical reaction and thus the molecular exchange between the supply chamber and the individual wells of the inner housing is essentially based on diffusion.
30. A method for carrying out one or several biochemical reactions concurrently, said method comprising utilizing a device as claimed in as claimed in 26 or 27, wherein the supply liquid and optionally the producing system in each of the wells of the inner housing are moved during the

biochemical reaction by means of a magnetic stirring element.

31. A kit comprising the following components: a solution comprising a substance buffering between pH 7 and 8, 150 to 400 mM potassium ions, 10 to 50 mM magnesium ions, nucleotide triphosphates, amino acids and a substance reducing sulfide groups; an energy-rich compound; a tRNA fraction; and optionally a RNA polymerase and/or a cell-free lysate.

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